2: Castetter and Opler N, E-5 (1931-1934)1936
NT8 Eastern Apache NT8
CHIRICAHUA
MESCALERO

GEOGRAPHICAL SETTING

101 These Apache were a highly mobile group and their [484] geographical background is, therefore, not so well understood as is that of sedentary tribes. Also in the early days of Spanish penetration they were known by various names and confused with other groups. In view of these circumstances it is impracticable to try to fully describe their geographical setting; hence, only a few examples of this aspect of their environment will be presented.

133 The territory through which they ranged constituted a 137 rich variety topographically and climatically, ranging from the flat lowlands of the Southwest, such as the Tularosa Basin, where sagebrush *(Artemisia filifolia)*, creosote bush, Mormon tea, cacti, yuccas, and mesquite comprise the characteristic vegetation; through the low hills where mescal and sotol abound; the foothills of the mountains where one-seeded juniper, piñon, and three-leaved sumac grow in abundance; to the higher elevations covered by growths of western yel- 132 low pine, spruce, and aspen. The mild, sunny winters and 133 devastatingly hot summers of the lowlands contrasted greatly with the severe, snow-ridden winters of the mountains, although the mountains were cool and invigorating 136 during other seasons of the year. The fauna varied with the 133 elevation, too. In the flats were the prairie dogs, rabbits, and antelope; in the mountains, deer, elk, and mountain sheep.

221 Of all this variety the Apache was the master. He moved with the seasonal change of weather, and followed [182] the wild food harvests as they occurred. His adaptation and response to the ecological region in which he lived was sensitive and complete. When the colder weather came he removed to a lower altitude; in summer he was in the high- [222] lands again. When the mesquite and screwbean ripened on the flats, parties of Apache were there to gather them; when the hawthorn hips were ready in the highlands, Apache were nearby to take them. These people knew nature's calendar by heart, and no matter whether a grass seed ripened or a

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133 leys are traversed by the Pecos and Rio Grande rivers and in the region between these rivers are other valleys entirely enclosed by higher ground with, therefore, no draining outlets. The Tularosa Basin is one such enclosed area (*14*:11). It has a maximum length of about 150 miles and a maximum width of about sixty miles. The interior of the basin contains an extensive area of alkali flats and white gypsum sands about four thousand feet above sea level, to the south of which lies a large sandy desert with slight relief and lack of definite drainage. The northern half of the basin includes, between the mountain borders, a plain that descends gradually from the Mesa Jumanes, six thousand to seven thousand feet above sea level, to the alkali flats, but is broken by many hills, buttes, and ridges, and by a ribbon of extremely rough lava that extends along its central axis for more than forty miles (*14*:12). The altitude of the Mescalero Indian Reservation Agency is 6,627 feet (*7*:7.).

• 132 133 [137] The climate of the basin is typical of the arid Southwest, marked usually by a clear sky, dry rare atmosphere, warm days and cool nights, both in summer and winter. The average annual rainfall of the lowland plains is about ten inches and thus supports a vegetation of characteristic desert appearance. The high mountains at the borders of the basin receive more precipitation, are covered with forests, and give rise to several small streams which flow into the basin. Owing chiefly to fluctuations in altitude the basin has a wide range of temperature.

133 [131] As has already been mentioned, the favorite haunts of the Mescalero were in the San Andreas, Sacramento, and Guadalupe mountains. The San Andreas extend in a general north-south direction, and for a distance of eighty miles comprise the west wall of the Tularosa Basin, reaching a height of 9,040 feet in Salinas Peak. The range is remarkably continuous and unbroken, having only two principal notches and terminating at the south with San Agustin Peak, which is less than seven thousand feet above sea level (*14*:30).

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133 level. Numerous canyons cut both sides of the range, and, during the rainy season, many small streams flow a short distance into the valley *(15:*22;*9:*4).

137 Sulphur Spring Valley and adjacent mountains show
• [132] marked variation in annual precipitation averaging, for the Chiricahua Mountains, more than twenty inches *(15:*78-83). Meinzer's *(15:*182-84) description of the native vegetation of Sulphur Spring Valley drainage basin shows western yellow pine as the dominant vegetation on the higher levels of the Chiricahua Mountains. On the foothills and lower ranges junipers and oaks are common, and in ribbons of timber which stretch along the stream courses, oaks and sycamores are the characteristic vegetation. The higher parts of the valley adjacent to the mountains support what he terms upland grass and brush zone, extending over three-fourths of the valley. Most of it is covered with a light growth of various grasses, but in the central and southern parts of the valley it includes extensive tracts of shrubs, especially creosote *(Covillea glutinosa)*, as well as groves of Yucca. Lying on the middle and lower parts of the stream-built slopes is a zone of mesquite covering about one-sixth of the valley surface and also extending as scattered tracts on the upper slopes. A small portion of the valley area is covered with sagebrush *(Artemisia filifolia)*. Low tracts, partly enclosed by the mesquite areas, support a zone of alkali vegetation—shadscale *(Atriplex canescens)*, *Suaeda suffrutescens*, alkali sacaton or bunchgrass *(Sporobolus airoides)*, and Mexican salt grass *(Eragrostis obtusiflora)*. Finally, in the lowest part of the flat in the north basin is an area of about fifty square miles practically destitute of vegetation.

RELATION TO NATURAL SURROUNDINGS

433 182 It is especially important to understand the Apache's relation to his natural surroundings because his economy proceeded almost entirely on a hunting and gathering level. There was a late introduction of agriculture which will be